REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed December 16, 2004. Claims 32-39 have been added to more particularly set forth the novelty of the instant application. No new matter has been entered. Claims 9-31 have been canceled. Thus, Claims 1-8 and 32-39 are currently pending. Applicant respectfully requests reconsideration and favorable action in this case.

Rejections under 35 U.S.C. § 102 and. § 103

Claims 1-3 stand rejected as anticipated by EP 1052466 by Ebara Corporation ("Ebara"). The standard for "anticipation" is one of fairly strict identity. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), MPEP § 2131.

Claim 1 recites,

> [a] system for continuous purification of a gas flow comprising:
>
> a first sodium fluorine trap coupled to a gas supply line, wherein said gas supply line conducts said gas flow;
> a second sodium fluorine trap coupled to said gas supply line in parallel to said first sodium fluorine trap;
> a switching mechanism operable to switch gas flow from said first sodium fluorine trap to said second sodium fluorine trap at the occurrence of a predefined event

Thus, claimed is a gas flow purification system having a pair of parallel sodium fluorine traps coupled to a gas supply line. The system includes a switching mechanism configured to switch the gas flow from one sodium fluorine trap to the other sodium fluorine trap. Such switching occurs at some predefined event. Sodium fluoride ('NaF') traps are chemical traps that react with hydrogen fluoride ('HF'), thus trapping HF and removing it from the gas flow (Specification – [0051]). Consequently, the parallel arrangement of the sodium fluoride traps provides a redundant system for removing HF. Further, as is known to one of skill in the art, sodium fluoride traps remove volatile metals.

Ebara does not disclose each and every element set forth in the pending claims, some distinctions of which are set forth below. Ebara discloses a process for recovering a PFC gas discharged from a vacuum processing chamber using cooling traps. (Ebara – Abstract and [0009]). Cooling traps differ from NaF traps because they rely on a phase change in particular gases to trap those gases that undergo the phase change rather than relying on a chemical reaction with the NaF material to trap the gas. Inducing this phase change in a cooling trap requires a cooling system. Furthermore, the cooling traps do not typically remove certain metals removed by a NaF trap.

Moreover, Ebarra does not teach or suggest a parallel trap arrangement such as that of Claim 1 that can remove HF from F_2 using NaF traps. Instead, HF and F_2 appear to be separated in series at 19 and it is unclear if HF is removed from F_2 at 3 or if the HF and F_2 are simply removed from the exhaust stream together. (Ebara – [0042]). Thus, although Ebara may remove HF from an exhaust gas stream, Ebara does not provide a redundant system for removing HF from F_2. Consequently, Ebara does not teach or suggest the limitations of the pending claims. Further, Ebara provides no motivation for the limitations of the pending claims. Applicant submits that while the Examiner points to paragraphs [0009] and [0043] of Ebara as showing the claimed limitations, examination of these paragraphs fails to illustrate the claimed limitations and, therefore, Ebara cannot be properly construed as anticipating or rendering obvious the pending claims.

Ebara provides neither teaching nor suggestion for a system to continuously purify a gas flow conducted through a gas supply line coupled to parallel first and second *sodium fluoride traps* where a switching mechanism operates at a predefined event such that the gas flow switches from one sodium fluoride trap to the other. Therefore, Ebara does not and cannot anticipate the claimed limitations. Further, Ebara provides no suggestion or motivation to modify such that the claimed limitations are met. Consequently, the cited art does not render the claimed limitations obvious. For at least these reasons, Applicant respectfully requests withdrawal of the rejections

New Claims

Claims 32 - 39 have been added. Claims 32-35 depend from independent Claim 1 and are patentably distinct from the cited art for at least the same reasons as independent Claim 1, recited above. Claims 37-39 depend from Independent Claims 36.

Claim 36 recites:

> [a] system for continuous purification of a gas flow comprising:
> at least one fluorine generation cell, wherein said at least one fluorine generation cell is coupled to a gas supply line, wherein said at least one fluorine generation cell provides said gas flow;
> at least two sodium fluorine traps coupled to said gas supply line, wherein said gas supply line conducts said gas flow, wherein said gas flow comprises fluorine and trace hydrogen fluorine, and wherein said at least two sodium fluorine traps are configured in parallel;
> at least one manifold operable to direct said gas flow from said at least one fluorine generation cell to one of said at least two sodium fluorine traps; and
> a switching mechanism operable to switch gas flow such that gas flow is directed to an operable sodium fluorine trap.

Added Claim 36 is supported by the Specification. For example, the Specification recites," [t]he process gas (fluorine) is thus output from process gas generation cells 14 to one or another sodium fluoride trap 32 through a manifold 34. Manifolds 34 can be used to route a process gas to either of sodium fluoride traps 32, such that if either NaF trap is out of service for regeneration or repair, the other can receive process gas from either process gas generation cell 14" (Specification - [0050]). As another example, the Specification recites, "... one sodium fluoride trap 32 is always on-line, with the other NaF trap 32 (or other ones) regenerating or being maintained. Manifolds 34 .... are operable to route process gas from a fluorine generation cell 14 to an operable NaF trap 32." (Specification - [0051]). Thus, added Claim 36 does not present new matter. Applicant asserts that added independent Claim 36 is patentably distinct, and claims dependent from Claim 36 are patentably distinct for at least the same reasons as Claim 36.

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include an acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1-8 and 32-39. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

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